



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,508

09/28/2006

Yuichi Inada

59559.00039

1763

32294

7590

01/13/2009

SQUIRE, SANDERS & DEMPSEY L.L.P.

8000 TOWERS CRESCENT DRIVE

14TH FLOOR

VIENNA, VA 22182-6212

EXAMINER

BODAWALA, DIMPLE N

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

01/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,508	Applicant(s) INADA ET AL.	
	Examiner DIMPLE N. BODAWALA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-11 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/14/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue (JP 2001-150488).**
3. As to claim 7, Inoue discloses an injection molding apparatus which comprises first mold plate; second mold plate; stamper (3); first mirror surface disk (15) attached to the first mold plate (2); a second mold plate (1) disposed to advance and retreat in relation to the first mold plate (2); a second mirror surface disk attached to the second mold plate and forming a cavity (13) in co-operation with the first mirror surface disk in a mold clamped condition; a stamper (3) attached to the mirror surface disk and having a fine pattern formed on a front end surface thereof; a bush (8,10) extending through the mirror surface disk (See figure 1); and the other mirror surface disk comprises a through hole that disposes the bush is formed radially inward of a region for forming clamp area (See figure 6-7). Figure 7 shows that the a first region provided to extend radially outward from an outer circumferential edge of the through hole projects from a second region

provided to extend radially outward from the first region so as to form a step between the first and second regions.

4. As to claims 8-9, Figure 7 shows that the front end surface of the other mirror surface disk comprises annular groove (23), which is involved to form a stack rib, wherein groove is formed between the first and second region, and the first region is a region that forms a clamp area.

5. Inoue discloses all claimed structural limitations as discussed above, and, thus, the claims are anticipated.

6. **Claims 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Asai (US 5,460,763).**

7. As to claim 7, Asai ('763) discloses a disc mold which comprises first mold plate; a first mirror surface disc attached to the first mold plate; a second mold plate disposed to advanced and retreat in relation to the first mold plate; a second mirror surface disc attached to the second mold plate and forming a cavity in co-operation with the first mirror surface disc in a mold clamped condition (See figure 1); a stamper attached to one of the first and second mirror surface discs and having a fine pattern formed one a front end surface thereof (See figure 1); and a bush extending through another one of the first and second mirror surface discs (See figure 12). It further teaches that the other mirror surface disc being characterized in that a through hole

that disposed the bush is formed radially inward of a region for forming a clamp area (See figure 12). It further teaches that first region provided to extend radially outward from an outer circumferential edge of the through hole projects from a second region provided to extend radially outward from the first region so as to form a step between the first and the second regions (see figures 5, 8 and 11).

8. As to claim 8, it further teaches that the groove (10C) formed on the front end surface of a mirror surface disc at a predetermined location (See figures 5, 8 and 11).

9. As to claim 9, it further teaches that groove is formed between the first and second regions; and the first region is a region that forms the clamp area (see figures 5, 8 and 11).

10. As to claims 10-11, Figure 11 further suggests that the groove is formed in first and second regions.

11. Asai discloses all claimed structural limitations as discussed above, and, thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. **Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (JP 2001-150488).**

14. Inoue discloses all claimed structural limitations as discussed above. It further teaches that the groove is formed between first and second region, but fails to teach or suggest that first and second region comprise groove.

15. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Inoue by providing groove in first and second regions because such an alignment is involved to provide a clearance between stack mold which is involved to form clamp area and signal area as required.

Response to Arguments

16. Applicant's arguments filed on 10/14/2008 have been fully considered but they are not persuasive.

17. Applicant argues that claims 7-11 and 13-18 are not distinct inventions under 37 C.F.R. 1.145. For example, claims 7-11 are directed to a mirror surface disk for a mold for molding a disk, while claims 13-18 are directed to a mold that comprises the mirror-surface disk of claim 7. Accordingly, both claims 7-11 and 13-18 recite a mirror-surface disk and mold, where the mirror-surface disk for each claim set comprises the same limitations.

Therefore, the constructive election alleged is improper because claims 7-11 and 13-18 do not recite different inventions under 37 CFR 1.145.

18. Applicant's argument is fully considered but not found persuasive because there is no specific technical feature since the limitations of the claim are taught by the prior arts as discussed in the rejection of claims. Thus, the requirement is still deemed proper and is therefore made FINAL.

19. This application contains claims 13-18 are drawn to an invention nonelected with traverse in the reply filed on 7/14/2008. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

20. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

21. Applicant further argues that the prior art, Inoue discloses an inside end of a stamper is fitted to a ring-shaped projection part. The ring-shaped projection part is formed in the outside end a cavity side of an inside holder. Using ring-shaped clearance, the stamper is vacuum sucked in an area inside

an uneven surface to increase force for fitting the stamper into a mold.

However, Inoue does not disclose or suggest at least a first region provided to extend radially outward from an outer circumferential edge of the through hole projects from a second region provided to extend radially outward from the first region so as to form a step between the first and second regions as cited in claim 7.

22. In response to Applicant's arguments, Inoue discloses figure 7 which clearly shows that the device comprises annular recess (23) between first and second region, wherein such recess is extended radially outward from the first region from an outer circumferential edge of the hole to a second region and formed step between the first and second region.

23. Applicant further argues that the prior art, Asai discloses a mold that includes stationary and moveable mold members, and a cavity for molding disc between mating surfaces of two members. Asai discloses a gate is formed in a gap between an opening edge of a gate insert and corner portion of a shoulder portion of a hot plunger cap, wherein gate insert has a leading end face for forming cavity face, wherein leading end face is formed in an inner circumferential edge with an annular recess for forming a crest face and outer slopes to form a stack rib of the disc. However, Asai fails to disclose or suggest at least a first region provided to extend radially outward from an

outer circumferential edge of the through hole projects from a second region provided to extend radially outward from the first region so as to form a step between the first and second regions as cited in claim 7.

24. In response to Applicant's arguments, Asai disclose mold assembly having gate insert (10) as a through hole and annular recess (10c) which is extended radially outward from the first region from an outer circumferential edge of the hole (10) to a second region and formed step between the first and second region (See figure 5, 8, 11). Therefore, Rejection of claims has been maintained.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period

for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/594,508
Art Unit: 1791

Page 10

Dimple N Bodawala
Examiner
Art Unit 1791

/D. N. B./
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791